



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

AUG 10 2015

REPLY TO THE ATTENTION OF:

E-19J

Julie Ann Smith, Ph.D.  
Office of Electricity Delivery and Energy (OE-20)  
U.S. Department of Energy  
1000 Independence Avenue SW  
Washington, DC 20585

Re: Great Northern Transmission Line Project, U.S. – Canada Border, Northern Minnesota,  
Draft Environmental Impact Statement (DEIS).  
CEQ No.: 20150178

Dear Dr. Smith:

The United States Environmental Protection Agency (EPA), Region 5 reviewed the Draft Environmental Impact Statement (DEIS) prepared by the U.S. Department of Energy (DOE) and Minnesota Department of Commerce – Energy Environmental Review and Analysis (DOC-EERA) for the Great Northern Transmission Line Project (GNTL), pursuant to Section 309 of the Clean Air Act (CAA), Section 102(2)(C) of the National Environmental Policy Act (NEPA), and Council on Environmental Quality regulations (40 CFR Parts 1500-1508). This letter provides our comments.

Minnesota Power (Project Proponent, Applicant), an operating division of ALLETE, Inc., is seeking: 1) a Presidential permit from DOE to construct, operate, maintain and connect a new high voltage electric transmission line across the U.S.-Canada (Manitoba) border in northern Minnesota, and 2) a Route Permit under the Minnesota Power Plant Siting Act from the Minnesota Public Utility Commission. The joint Federal/State DEIS was prepared to avoid duplication in environmental review procedures.

GNTL is proposed as an approximately 220-mile long, 500-kilovolt (kV) overhead, single-circuit, alternating current (AC) electric transmission system in Minnesota, from the Canadian Province of Manitoba to the existing Blackberry Substation near Grand Rapids, Itasca County, Minnesota. The GNTL proposal also includes expansion of the existing Blackberry Substation to accommodate the required 500-kV interconnection and construction of a new 500-kV series compensation station, regeneration stations, permanent access roads, temporary access roads, laydown areas, and fly-in sites. GNTL would carry electricity generated in Canada by hydroelectric facilities operated by Manitoba Hydro, a Canadian electric utility, and would support the regional electric grid, including transmitting approximately 883 megawatt (MW) of additional power in Minnesota.

The DEIS presents a range of issues and analysis of potential impacts associated with two alternative transmission line routes (Blue route and Orange route) in Minnesota, their associated potential variations/local route alternatives and modifications, and five potential international border crossing locations. A DOE and Minnesota Power preferred alternative for the international crossing location at latitude 49 00 00.00 N and longitude 95 54 50.49 W is identified, roughly 2.9 miles east of Highway 89 in Roseau County, Minnesota. The DEIS also identifies the Blue Route as Minnesota Power's preferred alternative route.

Base on EPA's review of the project, we rate the DEIS Preferred Alternative as Environmental Concerns -Insufficient Information (EC-2). The EC-2 rating indicates that we have concerns that the document does not contain enough information to fully assess the environmental impacts that should be avoided in order to fully protect the environment. See the enclosed Summary of Rating Definitions for a detailed explanations of EPA's ratings.

EPA concerns regard potential impacts to wetlands, upland forest and associated wildlife habitat, federal and state listed species, cultural resources and identification/disclosure of mitigation measures. Enclosed are our detailed comments. We make recommendations for additional information to include in the Final EIS (FEIS).

EPA requests DOE provide two hard copies and three CDs of the FEIS for our review and comment. If you would like to discuss the content of this letter and enclosure in more detail, please contact Virginia Laszewski of my staff at 312/886-7501 or at [laszewski.virginia@epa.gov](mailto:laszewski.virginia@epa.gov).

Sincerely,



Kenneth A. Westlake,  
Chief, NEPA Implementation  
Office of Enforcement and Compliance Assurance

Enclosures (2): EPA's DEIS comments, and Summary of Rating Definitions

Cc (email): Bill Storm, Environmental Review Manager, Minnesota Department of  
Commerce, [bill.storm@state.mn.us](mailto:bill.storm@state.mn.us)  
Tamara Cameron, Chief Regulatory, U.S. Army Corps of Engineers-St. Paul  
District, [Tamara.E.Cameron@mvp02.usace.army.mil](mailto:Tamara.E.Cameron@mvp02.usace.army.mil)  
Bill Baer, U.S. Army Corps of Engineers, [William.A.Baer@usace.army.mil](mailto:William.A.Baer@usace.army.mil)  
Andrew Horton, U.S. Fish and Wildlife Service, Twin Cities Field Office,  
[Horton.andrew@usfws.gov](mailto:Horton.andrew@usfws.gov)

**EPA Comments on Great Northern Transmission Line (GNTL) Project**  
**Draft Environmental Impact Statement (DEIS)**  
 [U.S. Department of Energy (DOE/EIS-0499) / Minnesota Department of Commerce (E015/TL-14-21)]  
**(CEQ No.: 20150178)**

Alternatives - Preferred Border Crossing Location and Preferred Alternative Route

The DEIS identifies and assesses impacts associated with 5 potential border crossing alternative locations and variations, and identifies a DOE and Minnesota Power preferred alternative for the international crossing location (Proposed Border Crossing-Blue/Orange Route) at latitude 49 00 00.00 N and longitude 95 54 50.49 W, roughly 2.9 miles east of Highway 89 in Roseau County, Minnesota.

In addition, the DEIS identifies and assesses impacts associated with two major alternative routes (Blue Route and Orange Route), segment options and variations thereof from potential border crossing locations to the Blackberry Substation. The DEIS identifies the Blue Route as Minnesota Power's preferred alternative route. The Blue Route originates at the DOE/Minnesota Power DEIS identified preferred international border crossing location.

The DEIS also identifies and discusses proposed locations and potential impacts associated with the compensation station, regeneration stations and expansion area for the Blackberry Substation. However, the DEIS has minimal to no specific information regarding the proposed locations, and type and estimated amount of resources impacted by the proposed permanent access roads, temporary access roads, laydown areas, stringing areas, and fly-in sites.

More than half the length of the GNTL Blue Route utilizes new terrain that is largely wetlands and forest land in a substantially rural area with limited roads. For the Blue Route, the data tables in DEIS *Appendix E* identify 1,976 acres of forested wetland and 2,265 acres of upland forest within the 200-foot ROW. To establish and maintain this ROW, trees in the ROW will need to be cut and prevented from growing in perpetuity. Due to the remote nature of the ROW, there may be additional impacts that have not yet been accounted for in the DEIS.

Recommendations: EPA recommends the FEIS identify Minnesota Power's proposed locations for permanent and temporary access roads, laydown areas, stringing areas and fly-in sites. We recommend these facility locations along with potential pole locations be identified on all FEIS resources maps/figures depicting the preferred alternative route. In addition, the FEIS should identify the amount and type of each resource impacted by these facilities for each proposed facility location and disclose this information in an FEIS Preferred Alternative Impacts Summary Table. (See additional EPA comments and recommendations later in this enclosure regarding wetland impacts under the headings "Wetlands and Clean Water Act Section 404," and for *Appendices E, F and G* under the heading "Appendices.")

#### Wetlands and Clean Water Act Section 404

The DEIS identifies avoidance and minimization efforts made, to date, for locating the Blackberry Substation expansion, new compensation station and regeneration sites. However, there is minimal to no information in the DEIS to substantiate that pole placement and other associated GNLT facilities (i.e., permanent and temporary access roads, laydown areas, stringing areas and fly-in sites) would have minimal to no direct wetland impacts.

Recommendations: The FEIS should specifically identify how many acres of wetland will be directly affected by the discharge of fill material, as well as how many acres will be converted from one wetland type to another. The FEIS should also include specifically what the project proponent proposes as compensatory mitigation to offset wetland losses. We recommend the FEIS include a Wetland Mitigation Plan.

## **2.0 Proposed Project**

**2.11 Construction Procedures** (page 34) *"The Applicant has indicated that they would retain an environmental inspector during project construction, responsible for understanding all of the conditions of the proposed Project's environmental permits and ensuring that contractors abide by these conditions. These Applicant proposed measures are potential MN PUC Route Permit conditions."*

Recommendations: We recommend that a third party independent inspector, such as the Minnesota Department of Natural Resources (MnDNR), be utilized as recommended by MnDNR in their August 15, 2014 letter (page 8 of 26), Third Party Independent Monitors, that was addressed to DOC regarding the GNLT Route Permit application. We recommend the FEIS disclose whether or not MnDNR or some other third party independent environmental inspector will be used for GNLT construction.

## **5.0 Affected Environment and Potential Impacts**

### ***Air Quality***

Page 106, *Air Quality in the ROI* - The DEIS correctly identifies that all counties in the region of influence (ROI) are in attainment or unclassifiable (to be considered in attainment) for all National Ambient Air Quality Standards (EPA 2015). Therefore, DOE's proposed action is exempt from applicability of the General Conformity Rule requirements of the Clean Air Act.

### **Construction Impacts**

Page 110 - *The Criteria Pollutants* section indicates that the total emissions of criteria pollutants from construction of the proposed Project cannot currently be quantified.

Recommendation: We recommend the FEIS include an estimate of the total emissions of criteria pollutants from construction of the proposed Project.

Page 109 – *General Impacts* section identifies best management practices (BMPs) which could be included as MN PUC Route Permit conditions, such as: minimizing idling of construction vehicles; utilizing existing power sources or clean fuel generators rather than diesel-powered

generators, ensuring that construction equipment is properly tuned and maintained prior to and during on-site operation; and developing a project-specific dust control plan. Page 110 – *The Criteria Pollutants* section refers the reader to Table 2-2 for the project proponent’s proposed mitigation measures to reduce construction emissions. However, Table 2-2 (pages 41- 42) identifies only one proposed measure to address air quality during construction: “*Regular, frequent cleaning of construction equipment and vehicles on the ROW.*”

Recommendation: We recommend Minnesota Power pursue opportunities to use clean diesel equipment, vehicles, fuels and other emission reduction strategies during project construction. The FEIS should identify additional air quality measures that Minnesota Power proposes to utilize and/or MN PUC intends to include as conditions in the MN PUC Route Permit.

Page 111- *The Climate Change and GHG Emissions* section discusses the 12.01 million metric tons of CO<sub>2</sub> equivalent representing the loss of carbon sink for the Proposed Orange Route.

Recommendation: Please site a reference for this calculation and clarify if the timeframe is for one or four years.

#### Operation, Maintenance, and Emergency Repair Impacts

Page 111-The *Criteria Pollutants* section states, “*These potential operational emissions are expected to be small and would result in limited impacts to air quality and would not affect the attainment status in the regions*”.

Recommendation: The document should provide an estimated range of emissions.

#### Forests and Wildlife Habitat, Forest Fragmentation and Invasive/Noxious Species

Wetland and upland forests play an important role in protecting water quality in the immediate watershed, providing wildlife habitat, and acting as a carbon sink. The proposed Blue Route would require the removal of approximately 4,829 acres of forest in the 200-foot ROW (*Air Quality in the ROI, Construction Impacts, Climate Change and GHG Emissions, page 110*), fragmenting existing forestland and providing an opportunity for the introduction and spread of invasive/noxious species. In addition, there may likely be additional wetland and upland forest lost due to construction of GNLT-associated facilities that have not been adequately identified and accounted for in the DEIS.

Recommendations: For forest impacts that do not require compensation under existing federal and/or state regulations, we recommend the project proponent undertake voluntary forest compensation for permanent and temporary tree losses due to construction and operation of the preferred alternative. Mitigation might include, but not be limited to, helping to finance forest restoration projects by local, state and/or federal natural resource agencies.

EPA also recommends the project proponent prepare, in coordination with MnDNR and the U.S. Fish and Wildlife Service (USFWS), a vegetation management plan to address control of invasive/noxious species plant intrusions. The plan should list the noxious weeds and exotic plants that occur in the resource area. In cases where noxious weeds are a threat, the plan should detail a strategy for prevention, early detection of invasion, and control procedures for each species. We recommend the vegetation management plan be included in the FEIS. (This recommendation is reiterated later in this enclosure for *Appendix B*, under the heading “Appendices.”)

Cultural Resources/Tribal Interests and National Historic Preservation Act, Section 106

**7.3.4 Archaeology and Historic Resources** (page 666) *“As discussed in Section 5.3.3.2, transmission line construction can result in damage, destruction, or alteration of historic buildings and buried archaeological resources. A Programmatic Agreement (PA) is under development by Department of Energy (DOE), Tribes, Minnesota State Historical and Preservation Office (SHPO), Advisory Council on Historic Preservation (ACHP), the Applicant, and other consulting parties to avoid and minimize impacts to cultural resources.”*

**5.3.3.3 General Impacts to Cultural Resources** (page 175) *“The PA that DOE intends to execute for the proposed Project will include stipulated measures to address the potential operation, maintenance, and emergency repair impacts on cultural resources and historic properties. Stipulations would be developed to identify cultural resources and historic properties, determine the effects of the proposed Project on historic properties, and determine measures that would be implemented to avoid, minimize, and mitigate adverse effects on historic properties.”*

Recommendation: We recommend that the signed/dated PA be included in the FEIS, if feasible. If not feasible, we recommend a draft of the PA be included in the FEIS and the final PA included as part of DOE’s Record of Decision (ROD) for GNTL. (See our recommendation for *Appendix P* later in this enclosure under “Appendices.”)

Listed Species, Candidate Species, and Species of Concern/Rare Species

**1.2.4.2 Section 7 of the Endangered Species Act** (page 6) *“The USFWS oversees compliance with the ESA (16U.S.C. Section 1536), which requires that federal agencies ‘insure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical habitat of such species.’ DOE, as the lead federal agency for the proposed Project, prepared a Biological Assessment in accordance with the ESA to analyze potential Project related impacts on federally-listed threatened and endangered species, candidate species, and species proposed for listing, and their designated critical habitats. Consultation under Section 7 of ESA is on-going. USFWS will issue a Biological Opinion and Incidental Taking Permit statement if necessary.”*

Recommendation: We recommend the FEIS update the status of DOE's Section 7 consultation with USFWS since the DEIS. Include DOE / USFWS communication/correspondence in FEIS Appendix Q.

**5.3.5.2 General Impacts** (page 192) – *“The proposed Project may affect, but is not likely to adversely affect these federally-listed species or designated critical habitat; the draft Biological Assessment (Appendix R) provides discussion on potential impacts of the proposed Project on Federally-listed species and designated critical habitat.”*

DEIS Appendix R does not contain a draft Biological Opinion. (See additional EPA comments regarding DEIS Appendix R later in this enclosure under the heading “Appendices.”)

Recommendation: We recommend the final Biological Assessment (BA) and the USFWS Biological Opinion (BO) be included in the FEIS. (This recommendation is reiterated later in this enclosure for Appendix R under the heading “Appendices.”)

**6.2.1.4 Natural Environment, Wildlife** (page 262) – *“The Applicant’s proposed measures to avoid, minimize, or mitigate impacts on wildlife resources are summarized in Section 2.13 and in the Applicant’s Route Permit Application. These measures, are primarily focused on birds (Minnesota Power 2014, reference (1)). Additional measures should include development of an Avian Protection Plan (APP), which would include an avian impact risk mitigation strategy, as suggested by the MnDNR (MnDNR 2014, reference (110)). The MN PUC Route Permit could require that an APP be developed and implemented as a permit condition. The Applicant should also work with the USFWS and MnDNR to include broader measures to avoid, minimize, or mitigate potential impacts to all wildlife species and associated habitats.”*

Recommendation: We recommend the FEIS include Minnesota Power’s GNTL Avian Protection Plan (APP). (Also see EPA recommendation for Appendix B, later in this enclosure under the heading “Appendices.”)

## **8.0 List of Preparers**

### **8.1 Federal and State Agencies**

Page 673 - Table 8-1 List of Preparers – Federal and State Organization. The title of Table 8-1 and presentation of the information in this table implies that the Federal cooperating agencies along with DOE and DOC-EERA prepared the DOE/DOC-ERRA DEIS.

Recommendation: To accurately reflect the roles of DOE and DOC-ERRA as lead federal and state agencies, respectively; and, EPA as a cooperating federal agency in DOE’s EIS process, we recommend that Table 8-1 be re-titled: *“Table 8-1 List of the Lead Federal and State Agencies, and Federal Cooperating Agencies.”*

**Appendices**  
**Appendix A**  
**Tribal Consultations**

Recommendation: We recommend the FEIS include additional correspondence/communications between DOE and the tribes since the DEIS.

**Appendix B**

**Route Permit Generic Template and Example** – The generic Route Permit *Section 4.10 Special Conditions* states: “The Permittee shall provide a report to the Commission as part of the plan and profile submission that describes the actions taken and mitigative measures developed regarding the project and the following special conditions.

[Describe any special conditions]

Examples of special conditions included in permits:

- *Avian Mitigation Plan*
- *Environmental Control Plan*
- *Agriculture Mitigation Plan*
- *Vegetation Management Plan*
- *Property Restrictions*
- *Minnesota Department of Natural Resources Requirements*
- *Minnesota Pollution Control Requirements*
- *Minnesota State Historical Preservation Office Requirements*
- *Minnesota Department of Transportation Requirements”*

Recommendations: EPA recommends the FEIS include the draft version of MN PUC Route Permit for GNTL, if available. We also recommend the FEIS include, but need not be limited to, an Aviation Mitigation Plan, Vegetation Management Plan, Erosion and Sediment Control Plan, and Stormwater Pollution Prevention Plan (SWPPP), Minnesota Department of Natural Resources Requirements, Minnesota Pollution Control Requirements, and Minnesota State Historical Preservation Office Requirements.

**Appendix E - Route Analysis Data Tables, Appendix F – Rare Species Data Tables, and Appendix G – Rare Communities Data Tables.** EPA appreciates the inclusion of these data tables in the DEIS.

Recommendations: We recommend these DEIS data tables be updated for the FEIS with any new information identified/developed since the DEIS. In addition, the FEIS should include a **Preferred Alternative Impacts Summary Table** with updated



information since the DEIS. This summary table should provide total amounts of estimated impacts for each resource for the entire 220-mile long GNTL preferred alternative.

#### ***Appendix O***

##### ***Agricultural Impact Mitigation Plan (AIMP) Example***

Recommendation: We recommend the specific Agricultural Impact Mitigation Plan for GNTL be included in the FEIS.

#### ***Appendix P***

##### ***Cultural Resources Report***

Recommendation: We recommend that the signed/dated Programmatic Agreement (PA) be included in the FEIS, if available. If not available, we recommend a draft of the PA be included in the FEIS and the final PA included as part of DOE's EIS Record of Decision (ROD) for GNTL.

#### ***Appendix Q***

##### ***USFWS and DOE Section 7 Consultation***

Recommendation: We recommend the FEIS update the status of the USFWS-DOE Section 7 consultation. DOE / USFWS communication/correspondence should be included in FEIS Appendix Q since the DEIS.

#### ***Appendix R***

***Biological Assessment*** - The only information included in DEIS Appendix R is following statement: "*The preparation of the draft Biological Assessment (BA) is underway, however it is not available for this EIS. The draft BA is being prepared in order to determine the impacts of the proposed Project on federally-listed species and to facilitate ESA Section 7 consultation.*"

Recommendation: The FEIS should include the final Biological Assessment (BA) and the USFWS Biological Opinion (BO) or most recent documentation updating the status of coordination with the USFWS regarding the GNTL proposal.

#### ***Appendix S***

##### ***Detailed Map Books***

Recommendation: We recommend the DEIS maps/figures that pertain to the preferred border crossing location and preferred alternative route be updated for the FEIS, to depict Minnesota Power's proposed locations for GNTL permanent and temporary access roads, laydown areas, fly-in sites, stringing areas, and pole locations.

## **SUMMARY OF RATING DEFINITIONS AND FOLLOWUP ACTIONS\***

### **ENVIRONMENTAL IMPACT OF THE ACTION**

#### **LO—Lack of Objections**

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

#### **EC—Environmental Concerns**

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

#### **EO—Environmental Objections**

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

#### **EU—Environmentally Unsatisfactory**

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

### **ADEQUACY OF THE IMPACT STATEMENT**

#### **Category 1—Adequate**

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

#### **Category 2—Insufficient Information**

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

#### **Category 3—Inadequate**

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*\*From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment.*